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EXAMINER	
TSOY, ELENA	
ART UNIT	PAPER NUMBER
1762	

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicant(s)

09/700,672

Applicant(s)

UERLINGS ET AL.

Examiner

Elena Tsoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 18-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 18-33 is/are rejected.
- 7) ☒ Claim(s) 19-29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. Amendment filed on April 20, 2002 has been entered. Claims 3-17 have been cancelled. New claims 18-33 have been added. Claims 1, 2, 18-33 are pending in the application.

***Claim Objections***

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 19-34 been renumbered 18-33.

3. Claim 19-29 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form since "the fibrous web" in claims 19-29 is not recited in a parent claim 1.

***Double Patenting***

4. Claim 18 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 2. When two claims in an application are duplicates or else are so close in content that they both

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cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2, 18, 22, 26-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2, lines 2-3; claim 18, line 2, a phrase "coating which *may* additionally *be* densified" renders the claim indefinite because it is not clear whether the coating is densified or not. For examining purposes the phrase was interpreted as -- "coating which *is* additionally densified --.

Claims 22, 29 recite the limitation "the fibrous web". There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "the surface of a fibrous web". There is insufficient antecedent basis for this limitation in the claim.

Claim 28 recites the limitation "said fibrous web" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "said coating of the fibrous web" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. **Claims 1, 19, 21, 24, 28, 31-33** are rejected under 35 U.S.C. 102(e) as being anticipated by Brownfield (US 6,306,493).

**As to claims 1, 33**, Brownfield discloses a method for generating a mark in the top coating of a paper substrate (a fibrous web, See column 3, lines 40-54) by coating the paper substrate with pigmented (white) coating composition (See column 2, lines 61-67; column 3, lines 1-4), treating the surface of the coated paper substrate with laser energy (See column 2, lines 47-49, 61-67; column 3, lines 1-4, 28-29), and subsequently applying top coating such as printing (opaque top coating), surface-coating, etc. (See column 5, lines 17, 27-31).

**As to claims 19, 21, 24, 28**, the paper substrate is a fibrous web (See column 3, lines 40-54).

**As to claim 28**, the fibrous web is opaque (See column 3, line 54), white (See column 2, lines 66-67).

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**As to claim 31**, said mark is logo, safety marking, and etc. (See column 1, lines 13-15; column 5, lines 4-8, 25-26).

**As to claim 32**, the paper substrate has a basis weight of 70-200 g/m<sup>2</sup> (See column 5, lines 41, 54, 66; column 6, lines 46).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 2, 18, 20, 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownfield (US 6,306,493), as applied above, and further in view of Malkia (US 4,738,197).

Brownfield, as applied above, fails to teach that the paper substrate is supercalendered.

Malkia teaches that paper web should be supercalendered in order to provide the paper surface with smoothness, which is necessary for high quality color printing (See column 1, lines 35-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have supercalendered the original paper of combination of JP 03113094 and Schell with the expectation of providing the paper with the desired improvement in quality of color printing, as taught by Malkia.

11. **Claims 22, 25, 26, 27, 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownfield (US 6,306,493), as applied above, and further in view of Monaghan (US 5,706,106).

Brownfield, as applied above, fails to teach that the fibrous web treated with laser energy is coated with metal (Claims 22, 25, 26) such as aluminum (Claim 30) before printing; the printing includes two (color) coatings (Claim 27).

Monaghan teaches that portions of an embossed holographic imagery on a paper substrate can be covered by non-holographic images such as metal deposition layer such as aluminum for later printing (See column 6, lines 1-6) for creating a new unexpected visual effect (See column 1, lines 43-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have covered engraved images on a paper substrate in Brownfield by non-holographic images such as metal deposition layer such as aluminum before printing with the expectation of providing the engraved paper substrate with desired new unexpected visual effect, as taught by Monaghan.

**As to claim 27**, Monaghan teaches that the embossed holographic imagery on the paper substrate can be covered by non-holographic images such as one or *more* color printing (See column 6, lines 25-29).

12. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Brownfield (US 6,306,493), as applied above, and further in view of Yasui et al (US 5,413,629).

Brownfield, as applied above, fails to teach that the fibrous web is a metal-coated and optionally printed, prior to treatment with laser energy.

Yasui et al teach that any printable thermosensitive substrate such as paper, plastic, plastic-coated or a metal-coated paper (See column 8, lines 49-53) can be provided with a marking information with high sensitivity and high marking density, i.e., a high contrast

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between a marked area and a background, by coating first the substrate with a printing ink and then treating the printed substrate with laser energy (See column 2, lines 31-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified a method for laser marking a paper substrate in Brownfield by first coating the paper substrate with a printing ink and then treating the printed paper substrate with laser energy with the expectation of providing the method with desired high sensitivity and high marking density, i.e., a high contrast between a marked area and a background, as taught by Yasui et al.

It would have been also obvious to one of ordinary skill in the art at the time the invention was made to have used a metal-coated paper as a paper substrate in a method of combination of Brownfield and Yasui et al with the expectation of providing the method with the same desired benefits, since Yasui et al teach that any printable thermosensitive substrate such as paper, plastic, plastic-coated or a metal-coated paper can be provided with a marking information with high sensitivity and high marking density, i.e., a high contrast between a marked area and a background, by coating first the substrate with a printing ink and then treating the printed substrate with laser energy.

### *Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (703) 605-1171. The examiner can normally be reached on 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Elena Tsoy  
Examiner  
Art Unit 1762

September 30, 2002



MICHAEL BARR  
PRIMARY EXAMINER